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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,662	05/30/2001	Hideaki Kuroda	SON-1199/CON	6271

7590

08/11/2004

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EXAMINER

PRENTY, MARK V

ART UNIT	PAPER NUMBER
2822	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/866,662	KURODA, HIDEAKI	
	Examiner	Art Unit	
	MARK V PRENTY	2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This non-final Office Action is in response to the amendment filed on July 15, 2004.

The specification is objected to because at page 16, line 4, "Fig. 1 is a process diagram" should read, "Figs. 1(1)-(3) are process diagrams." Correction is required.

Claims 3 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Narui et al. (newly cited United States Patent 6,150,689 – hereafter Narui).¹

With respect to independent claim 3, Narui discloses a semiconductor device (see the entire patent, including the Fig. 3 and Figs. 6-26 disclosure), comprising: a conductive layer pattern 9 formed on a substrate 1; a first inter-layer insulating film 10/17/18 which covers said conductive layer pattern and is formed on said substrate; a first connection hole (the upper part of connection hole 22) formed in an upper layer of said first inter-layer insulating film above said conductive layer pattern; a second connection hole (the lower part of connection hole 22) which reaches said conductive layer pattern 9 from the bottom portion of said first connection hole and then has a smaller diameter than that of said first connection hole and formed on said first inter-layer insulation film; a plug 20 having conductivity and filling internal portions of said first connection hole and said second connection hole; a second inter-layer insulating film 19/31/32 formed on said first inter-layer insulating film, wherein said second inter-layer insulating film includes up to five layers; a third connection hole 37 which reaches said plug and is formed through said second inter-layer insulating film; and a conductive

¹ Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

portion 36 which is connected to said plug and formed in said third connection hole, wherein said plug 20 and said conductive portion 36 are a storage node contact portion of a dynamic random access memory.

Claim 3 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Narui.

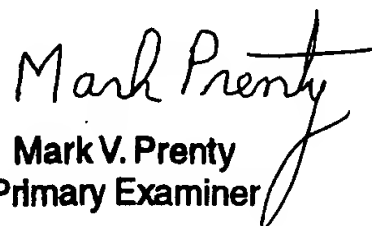
With respect to independent claim 4, Narui discloses a semiconductor device (see the entire patent, including the Fig. 3 and Figs. 6-26 disclosure), comprising: a conductive layer pattern 9 formed on a substrate 1; a first inter-layer insulating film 10/17/18 which covers said conductive layer pattern and is formed on said substrate; a first connection hole (the upper part of connection hole 22) formed in an upper layer of said first inter-layer insulating film above said conductive layer pattern; a second connection hole (the lower part of connection hole 22) which reaches said conductive layer pattern 9 from the bottom portion of said first connection hole and then has a smaller diameter than that of said first connection hole and formed on said first inter-layer insulation film; a plug 20 having conductivity and filling internal portions of said first connection hole and said second connection hole, wherein the upper surface of said plug is formed to almost the same height as the surface height of said first inter-layer insulating film; a second inter-layer insulating film 19/31/32 formed on said first inter-layer insulating film, wherein said second inter-layer insulating film includes up to five layers; a third connection hole 37 which reaches said plug and is formed through said second inter-layer insulating film; and a conductive contact portion 36 which is connected to said plug and formed in said third connection hole, wherein said plug 20

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and said conductive portion 36 are a storage node contact portion of a dynamic random access memory.

Claim 4 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Narui.

Registered practitioners can telephone the examiner at (571) 272-1843. Any voicemail message left for the examiner must include the name and registration number of the registered practitioner calling, and the Application/Control (Serial) Number. Technology Center 2800's general telephone number is (571) 272-2800.


Mark V. Prenty
Primary Examiner